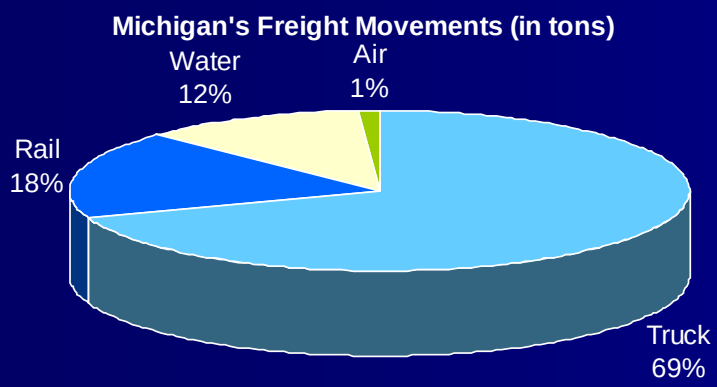
Michigan's Intermodal Freight Movement Citizens Advisory Committee Report

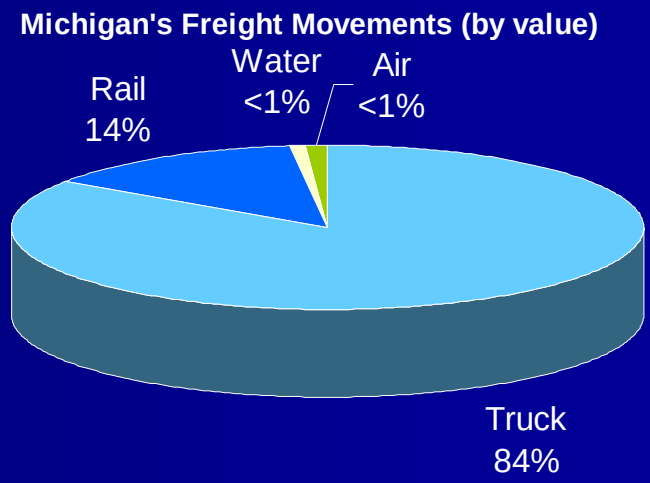
Prepared for the Transportation Funding Task Force
Submitted by the Intermodal Freight Subcommittee
July 2008

Freight transportation

- Michigan's transportation system supports all economic activities in the state.
- Michigan's transportation infrastructure moved 670 million tons of freight, valued at over $1 trillion (2003).

Freight transportation





Freight Transportation: Trucking

- 69 percent of freight by volume; 84 percent of freight by value
- Nearly every product consumed is moved by truck an average of seven times
- Freight volumes will almost double by 2035. The percentage of truck shipments will increase while the percentage of air shipments are expected to remain the same and rail and marine shipments are predicted to decrease. (USDOT Freight Analysis Framework)
- Better roads and congestion relief necessary

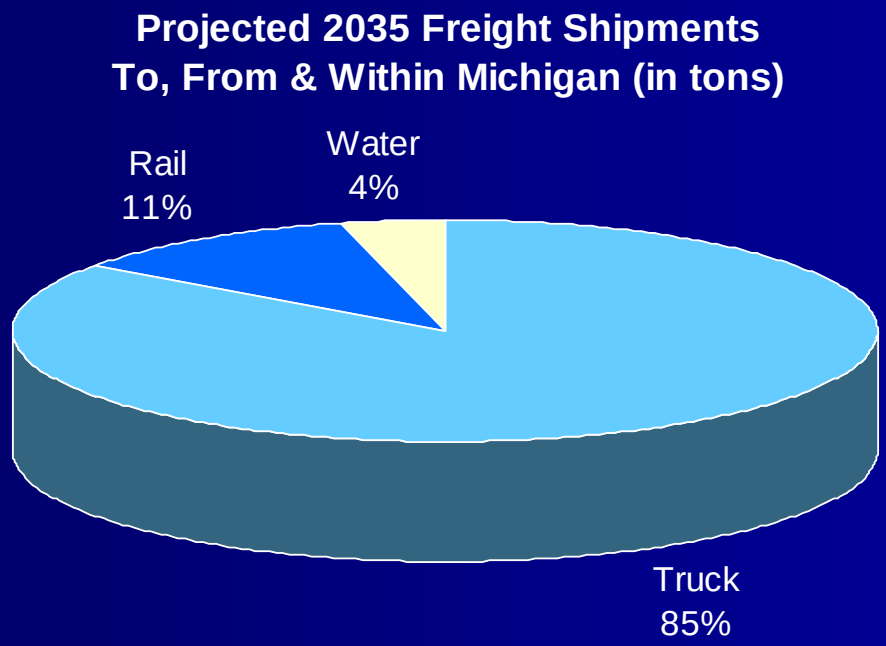
Freight transportation: Rail

- Approximately 3600 miles of track & 26 Operators.
- Carried nearly 120M tons of freight (2003).
- Value of movements are estimated to exceed $162B.
- Operations estimated to save $266M of roadway investment annually.

Freight transportation: Marine

- 3,200 miles of shoreline.
- 90 ports- approximately 40 cargo.
- Handled more than 88.5M tons (2005).
- Value moved estimated to exceed $5B.

Freight transportation: Forecast



Intermodal Subcommittee Perspective

- The Intermodal Freight Subcommittee acknowledges the broad needs identified by the Highways, Roads and Bridges Subcommittee.

- Key: *Prioritize* investment where it has the greatest impact on the movement of freight.
  - Intermodal interfaces where modes intersect (grade crossings, intermodal terminals, etc.)
  - Emphasis on truck routes of greatest impact
  - Non-infrastructure productivity enhancements will yield the greatest return on investment for Michigan.

Intermodal Subcommittee Perspective

- Movement of freight (accomplished with significant private sector investment by intermodal service providers) is vital to Michigan's economy and future growth.
- Listen to the "voice of freight" - it affects the every employer, manufacturer, consumer, and citizen.
- Freight needs are often opportunity costs – recognized secondary effects (and then it is too late...)

What's at Stake for Freight? Cost of "Do Nothing"

- Logistics costs could undermine future economic productivity, competitiveness and growth.
- Traffic congestion & freight movement impacts job creation.
- National cost of congestion could approach $200B per year.

What's at Stake for Freight? Cost of "Do Nothing" *(cont.)*

- A region's ability to minimize traffic congestion and provide reliable freight movement significantly impact whether or not jobs are created in that region. (Transportation Research Board, 2002)

What's at Stake for Freight? Cost of "Do Nothing" *(cont.)*

- Without growth in freight-rail system (privately funded), 900 million tons of freight could shift to highways by 2020
- Cost to shippers $326 billion and highway users $492 billion in travel time, operating and accident costs and necessitating $21 billion in highway improvements nationally. (USDOT Freight Analysis Framework)
- A region's ability to minimize traffic congestion and provide reliable freight movement significantly impact whether or not jobs are created in that region. (Transportation Research Board, 2002)

What's at Stake for Freight? Cost of "Do Nothing" *(cont.)*

- Michigan will lose out to other regions that invest in logistics-friendly transportation networks (Chicago, Kansas City, Dallas, Louisville)
- Michigan's roads 48th in the nation in a 2007 national survey of truck drivers. (Overdrive Magazine)
- Congestion consistently ranks in the "top 10" critical issues in the trucking industry (ATRI, 2007)
- Congestion causes costly delays ($60/person hour), compounding hours of service issues and truck driver shortages.

What's at Stake for Freight? Cost of "Do Nothing" *(cont.)*

- Between 1993 and 2003, the cost of highway congestion in the nation's urban areas increased from $39.4 billion to $63.1 billion, an increase of 60.2 percent. (Texas Transportation Institute)
- Productivity losses, costs associated with cargo delays, and other economic impacts to freight carriers and businesses are at stake.
- In Michigan, trucking accounted for nearly 670 million tons of Michigan commodity movements in 2003 valued at nearly $1 trillion. The trucking industry in Michigan employs about nine percent of the State's residents – but faces driver shortages and regulatory constraints

What Does Trucking Need?

Current Roads System (Cost of "Do Nothing")

- Escalating cost of delivery, operation & equipment maintenance
- Growing "stranded costs" of delay
- Reduced competitiveness for employers, manufacturers & consumers
- Increased costs of goods throughout the economy
- Marginalize Michigan's current competitive advantage of truck size & weight to reduce congestion and enhance cost savings to shippers

What Does Trucking Need?

Good: Enhancing Trucking Productivity

- Dedicate transportation funds to roads & highways - minimize non-road diversions. (Example: allocate 6 percent sales tax on motor fuels toward transportation rather than general fund.)
- Ensure *efficient* revenue collection and administration of transportation funds.
  - Trucking supports building on the advantages of fuel tax system
  - Trucking concerned about tolling & public private partnerships because of duplicative administrative costs and “paying twice.”
- Adopt policies that improve trucking productivity and release existing captive capacity

What Does Trucking Need?

Good: Enhancing Trucking Productivity (cont.)

- Focus transportation investments on congestion mitigation on commercial trade routes
- Focus on non- infrastructure means that will have the most impact on systemic chokepoints
  - Pre-clearance procedures at international borders (reduce secondary delays 90 percent)
  - expand Customs facilities at locations where MDOT has responsibilities
  - ITS at weigh stations; etc.

What Does Trucking Need?

Better: Priority Funding for Freight Movement

- Congestion mitigation on freight routes to improve mobility performance
  - 20 percent of state roadways are congested
  - 31 percent of trucking miles are on state trunklines
- Trade corridors (I-94, I-75, etc.) should be priorities; at borders, expand Customs Pre-Clearance participation (FAST, NEXUS)
- Maximize inspection facilities where MDOT has responsibilities
- All season roadways - Upgrade remaining 4 percent of state highways and sections of county road to Class A in industry corridors.
- Increase funding for forest roads - $5 million Transportation Economic Development Funds distributed to counties has remained at 1987 levels.

What Does Rail Need?

At Risk for Rail (Cost of "Do Nothing")

- Railroads invest private funds to maintain and expand network of tracks and facilities. Road resources are needed when roads and railroad tracks intersect. MDOT has big rail responsibilities (track and crossing programs)
- 20 percent of Michigan's crossings 4,800 rail crossings are in need of repair or replacement. (MI Railroad Association)
- No current funding available for crossing surfaces on local roads (typically 10-20 surfaces are repaired annually: 3 are planned for FY 2009)

What Does Rail Need?

At Risk for Rail (Cost of "Do Nothing")

- Active rail crossing warning devices reduce motorists risks 89 percent (eliminating rail crossings all together removes risk)
- Rail safety (i.e., grade crossings) and short-line improvements are the two system-wide needs. (AASHTO, Freight Bottom Line Report)
- An efficient freight network can relieve congestion on the state's highways and reduce funds needed for new lane miles.
- Intermodal (containerized) freight is the fastest growing rail segment, but without upgrades in Intermodal facilities in Michigan, cost effective freight movement is curtailed.

What Does Rail Need?

At Risk for Rail (Cost of "Do Nothing")

- As highway congestion increases, public policy-makers at all levels look to the railroads to carry more freight and relieve truck and highway congestion

  - On average railroads move one ton of freight 423 miles using one gallon of diesel fuel

  - Conserving energy

  - Reducing engine emissions

  - Growing demand on railroads press capacity of this nation's railroads

What does Rail Need?

MDOT Rail Program - Grade Crossing Needs

Roadway safety at public grade crossings.

- Motorist warning devices
- Crossing eliminations
- Trunkline surface improvements

What does Rail Need?

MDOT Rail Program - Grade Crossing Needs

Current grade crossing program ("Do Nothing"): $9.3M

- Reduced allocations & rise in project costs.
- Limits MDOT's ability to respond to changes necessitated by road improvement projects and slows on-going process of adding active-warning devices at crossings.

What does Rail Need?

MDOT Rail Program - Grade Crossing Needs

Good Grade Crossing Expenditures: $12.6M

- Respond to changes necessitated by road improvement projects and trunkline crossing surface deterioration
- Address about 5% of crossings that would most likely warrant active-warning devices.

What does Rail Need?

MDOT Rail Program - Grade Crossing Needs

Better grade crossing expenditures: $25.8M

- Improve trunkline crossing surfaces to meet good pavement condition goal of 90%.
- Upgrade active-warning devices at 10-20 trunkline crossings.
- Create program to upgrade the most critical crossing surfaces on local roads.

What does Rail Need?

MDOT Rail Program – Preservation /System Expansion

- Freight Economic Development Program
- Michigan Rail Loan Assistance Program
- Capital Development Program

What does Rail Need?

MDOT Rail Program – Preservation /System Expansion

Current rail system expenditures
("Do Nothing): $4.3M

- Current revenue for the management of the state-owned rail lines cover only fixed costs.
- Delayed track rehabilitation projects on the state-owned rail lines
- MiRLAP is less $2.7M of the full $15M contribution in law.

What does Rail Need?

MDOT Rail Program – Preservation /System Expansion

Good rail system expenditures: $6M

- Cover increasing property management costs, as well as emergency repairs on the state-owned lines.
- Move forward with some delayed track construction projects & make funds available for economic development activities.
- Bring MiRLAP to its full funding level, making $1.5M available per year for new loans .

What does Rail Need?

MDOT Rail Program – Preservation /System Expansion

Better rail system expenditures: $15M

- Complete delayed track construction projects.
- Undertake new construction projects on approximately 15-20 miles of the system per year.
- Market the FEDP and better position it to fulfill its role as part of MEDC incentive packages.
- Provide support to short-line railroads to meet the increasing demands for capacity improvements.

What does Marine Need?

(Most federal & privately funded)

- Dredging- funding and disposal locations
- Federal regulation to encourage short sea shipping
- Intermodal connections
- Constructing Sault Ste. Marie lock

Freight transportation: Intermodal Freight efficiencies

- Intermodal freight (containerized cargo) grew 32 percent (2001-2005) and can continue to address congestion. Truck, Rail, Marine) meet customer needs & provide cost effective service
- Michigan's truck weights have been a competitive advantage for automotive, agriculture, construction, manufacturing and steel industries
- As rail track is upgraded, will allow better use of 286,000 pound capacity railcars Divestiture of the state-owned lines (fewer trains haul more freight)
- Divestiture of state-owned rail lines helps focus resources for improved rail connectivity

Final Thoughts: Intermodal Freight Subcommittee

- Movement of freight often taken for granted
- Freight moves with significant private sector investment by intermodal service providers and is vital to Michigan's economy and future growth.
- Listen to the "voice of freight" - it affects the every employer, manufacturer, consumer, and citizen.

Thank You for Listening to the "Voice of Freight"

Intermodal Freight Subcommittee Members

- **Mickey Blashfield** - *Michigan Trucking Assn.*
- **Gloria Combe** - *Michigan Railroad Assn.*
- **Kari L. Hughston** - *Michigan Farm Bureau*
- **Keith P. Ledbetter** - *Michigan Infrastructure & Transportation Assn.*
- **Kirk T. Steudle** - *MDOT*